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which the trace data report may be returned from at least one of the report generator and the fabrication tool.

In the specification:

For the paragraph on p. 12, lines 2 - 20:

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In this particular embodiment, the APC System also includes a Plan Execution Manager [542] ("PEM," not shown), which is the component primarily responsible for "choreographing" the operation of the APC System 402. This involves interpreting APCFW Plans, executing main scripts and subscripts, and invoking event scripts as events dictate. A variety of plans, scripts, and subscripts may be used in various implementations. For instance, the present embodiment includes, but is not limited to, the following plans:

- data collection plan a data structure used exclusively by a sensor interface and machine interface defined by the PEM, the requirements in which what data should be collected from a specific processing equipment, and how that data should be reported back to PEM;
- duration plan defines the trigger conditions and the delays when triggers (i.e., conditions that causes add-on sensors to act upon, e.g., start data collection, stop data collection) happen;
- reporting plan defines what to do with the collected data, as well as when to signal the data's availability; and
- sampling plan defines the frequency at which the data is to be collected by the external sensor;

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However, the number and function of various plans, scripts, and subscripts will be implementation specific.

For the paragraph at p. 12, line 29 to p. 13, line 2:

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The PEM then delegates responsibility to run the plan to a Plan Executor ("PE") 542 [(not shown)]. The PE 542 sequentially executes the plan and reports completion of the plan or errors in the execution of the plan to the PEM. Thus, while the PEM is responsible for the overall management of all plans executed, a PE 542 is responsible for running only one plan. The PE 542 is created by the PEM, exists for the life of the plan, and is destroyed by the PEM after reporting that the plan is completed or aborted. Each PE 542 executes a main script and zero or more event scripts. A PEM can start multiple plans concurrently via multiple Plan Executors 542.

Please rewrite claims 23, 30, and 35 as set forth below. "Marked up" versions of the rewritten claims pursuant to 35 U.S.C. § 1.121 (c)(1)(ii), as amended effective November 29, 2000, are set forth below. The claims are presented in "clean" form pursuant to 35 U.S.C. § 1.121 (c)(1)(i), as amended effective November 29, 2000, on separate sheets enclosed herewith.

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- 23. (Amended) A [An] semiconductor fabrication processing system, comprising:
- a fabrication tool capable of providing at least one of specified data and a trace data report;
- a fault detection controller implementing a fault detection control, the fault detection controller being capable of automatically generating a request for the trace data report, the request including the specified data;

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a report generator capable of requesting at least one of the specified data and the trace data report from the fabrication tool and capable of, if the specified data is requested from the fabrication tool, providing the trace data report; and

an operator interface for receiving specified data for the trace data report, the specified data including at least one of a parameter, a trigger, and a frequency for the trace data report, and to which the trace data report may be returned from at least one of the report generator and the fabrication tool.

30. (Amended) An advanced process control, semiconductor fabrication processing system, comprising:

means for fabricating a wafer, the fabricating means being capable of providing at least one of specified data and a trace data report;

means for implementing a fault detection control, the fault detection control means [meansr] being capable of automatically generating a request for the trace data report, the request including the specified data;

means for generating a report, the report generating means being capable of requesting at least one of the specified data and the trace data report from the fabricating means and capable of, if the specified data is requested from the fabricating means, providing the trace data report; and

means for interfacing with an operator, through which an operator may specify the data for the trace data report, the specified data including at least one of a parameter, a trigger, and a frequency for the trace data report, and to which the trace data report may be returned from at least one of the report generating means and the fabricating means.

35. (Amended) The semiconductor fabrication processing system of claim 30, wherein at least two of the fault detection means, the interfacing means, and the report generating means [menas] reside on the same computer.

